Application of Savings and Loan Cooperative Services

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ABSTRACT

Information technology knowledge has become a necessity. Most of a person's daily activities involve the assistance of information technology, both teaching and learning activities, working in institutions and entrepreneurship. In addition, knowledge of information technology is a person's main asset to be able to compete in the digital era. A cooperative is an institution that runs on the principle of kinship. So that in carrying out its activities prioritizing the welfare of its members and aiming to increase the economic growth of the community.

The goal to be achieved in this community service activity is to produce an android based system of savings and loan cooperative service that is able to facilitate the delivery of information from management to members in real time and can provide solutions for speed, accuracy and accuracy. The method used in this research and development research uses the waterfall model, which is a process or steps to develop a new product or improve an existing product.

The system analysis was carried out with the initial stages of the research method, the communication stage was carried out by the interview and observation process. The observation process is carried out by making direct observations to get an overview and the interview process is carried out by conducting questions and answers to match the data and information. After designing the next step is build an android system based of savings and loan cooperative service.

KEYWORDS: Android; Cooperative; Information

INTRODUCTION

The smartphone application is one of the most widely applied and user friendly technologies. Smartphone is a necessity. Currently smartphones are also equipped with facilities that allow users to do whatever is needed, such as high-quality camera facilities with a large number of resolutions to take pictures with maximum results for both photos and videos, plus other features such as GPS, Wi-Fi. hotspots, and also share the connection. In addition, currently smartphones are also equipped with information systems such as Android, iOS, and Windows Phone.

Today, the development of information systems is a hot topic of discussion and is an important factor for a company to be able to compete in the world economy. Not only that, the use of information systems can also increase business efficiency and effectiveness within the company. Likewise in the cooperative sector, where the information system is no longer a means of support, but a necessity that can help manage data and can help expand the cooperative market.

The Savings and Loans Cooperative has a service product in the form of providing credit loans to its members. According to Hendrojogi (1998), cooperatives are a forum for low-income groups of people who, in an effort to meet their daily needs, try to increase their level of life. In providing loans, the administrative management system and cooperative savings and loan transactions are generally carried out semi-manually which can cause problems in the speed and accuracy of calculations as well as data availability. For members who live far from the location of the cooperative, they have their own main problems in knowing the status of credit applications or notification of payment of contributions or due dates for loan installments or knowing the repayment status of creditors.

Based on the description above, an android application system of savings and loan cooperative information is needed. Cooperative members, especially those who live far from the cooperative, can use this system via cellphone to get notification of financial transactions for members of the savings and loan cooperative.

The goal to be achieved is to design a system that is able to provide easy delivery of information from management to members regarding realtime member savings and loan transactions and can provide solutions for speed, accuracy and accuracy in carrying out savings and loan data processing to find out the status of credit applications and notification services for payment of contributions. or the due date for loan installment payments or the status of expansion.

RESEARCH METHODOLOGY

The method used in this research is Research and Development, which is a process or steps to develop a new product, or improve an existing product that can be justified. Sukmadinata (2006).

System analysis is carried out in a process related to the initial stages of the research method. In the research method taken using the waterfall model. In the waterfall model, there are several stages which include the communication stage and the planning stage.

The research object that became the sample was the Savings and Loan Cooperative (KSP) of the Bhakti Ibu Women Cooperative in Malang City, East Java. At the communication stage, the interview and observation process is carried out. The observation process is carried out by making direct observations to get an overview of the creditworthiness assessment process, an overview of the process of recording credit payments and the duties of each part that has an interest in the process. The interview process is carried out by conducting questions and answers to match the data and information from the observations. After conducting direct observations and interviews, a user needs analysis, data needs analysis and functional requirements analysis can be compiled.

From the results of the analysis obtained, then the design and design of the system is carried out using a predetermined system design method (structured design). Writing programs based on the results of structured design to make modeling, testing programs that have been written, to ensure that the programs created are as expected and make documentation and archiving of the system platform project designed.

RESULTS AND DISCUSSION

Conceptual Design

At the conceptual design stage, the components of the information system are designed with the aim of communicating to users. The Context Diagram shows the sequence of activities of the cooperative reporting system which contains one process which is numbered process 0. This process represents the process of the entire system. In the context diagram, the relationship between entities, input and output from the system is illustrated which can be seen in Figure 1.
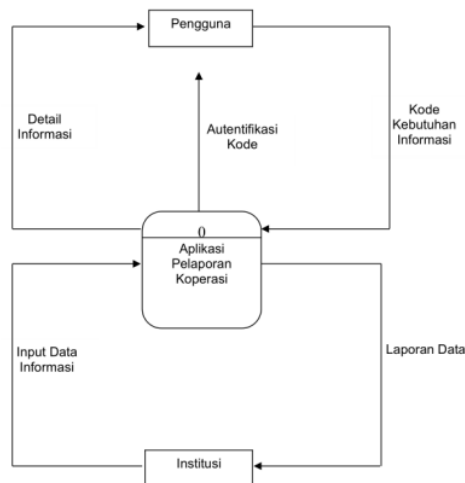

Figure 1 Context Diagram

From Figure 1 it can be explained that the relationship between external entities and the reporting application is as follows:

1. Input relationship between entities outside the User and Information Technology and Cooperative Reporting Applications is a code of information needs. The output relation consists of code authentication and detailed information.

2. Input relationship between entities outside the institution with Information Technology and Cooperative Reporting Applications is the input of a list of information. The output relation consists of a user list report.

Architectural Design

1. Database Design

Database design is needed to design the system data structure. This design is focused on data maintenance and data management that will be used. The database is designed using My-SQL using the Delphi programming language which can integrate interconnected data sets.

In database design, modeling (conceptual design) is carried out using ER (Entity Relationship Model) modeling.

2. Process Design

Data and processes that pass through the system are described as networks between functions that are related to one another (Data Flow Diagrams). In the level 1 data flow diagram design, the system data processing process consists of three processes, namely:

A. System Data Maintenance Process

Is the process of maintaining and updating (updating) system data with detailed system data from each data store. Maintenance results are stored in each data store.

B. Process Management

Receive data originating from the entity, add new data, retrieve data from the data store and generate detailed data.

C. User Report Process

Report/Output consists of the process of printing system-generated information. All required data is taken from each data store and printed so that it becomes a report / output in the form of information needed by each entity.

3. Desain User Interface (Input-Output)

User interface design is focused on designing the interactions that occur between the user and the computer system, including input-output methods and data and information conversion between human-readable and computer-readable forms. This design consists of an input design and an output design.

A. Input design

The input design is a data display designed to receive data input from the user as a data entry officer.

This input design must be able to provide clarity for the user, both in terms of form and from the data inputs to be inputted.

The input device used is an online input device which is directly connected to the CPU, namely the keyboard and mouse, so that the input process only consists of two main stages, namely the data capture stage, which is the process of recording real events in the form of data. -data into basic documents.

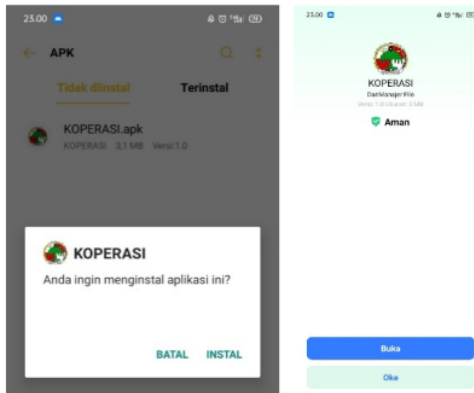The second stage is data entry, which is the process of reading or entering the data into a computer.

B. Output design
In addition to the input design, an output design is also required to be displayed on the monitor screen, printed by a printer. Output design must be made and designed properly according to user needs.
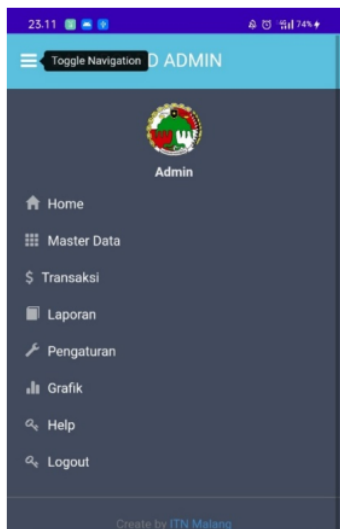
Here are some views of the android-based savings and loan cooperative service application and its main features.

Main feature:
1. User Settings
2. Deposit Arrangements
3. Loan Arrangements
4. Officer Data
5. Member Data
6. Data Savings
7. Loan Application Data
8. Transactions
9. Member Data Report
10. Deposit Data Report
11. Loan Data Report

Figure 4 User Data Settings Views

Figure 5 Settings Page Loan DataViews

Figure 6 Submission Page Views

Figure 7 Deposit Page Reports Views

Figure 2 Installing Applications and Initial Views

Figure 8 Loan Reports Views
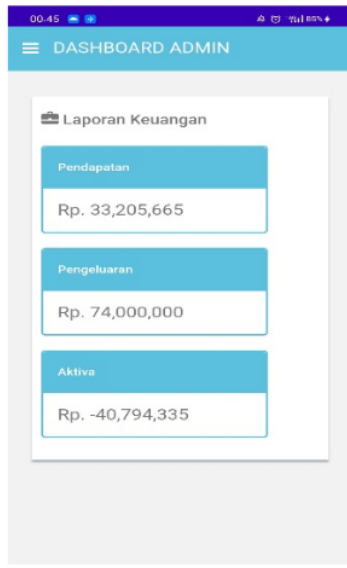

Figure 3 Dashboard Views

Figure 9 Financial Data Views

CONCLUSIONAND SUGGESTIONS

After designing an Android-based savings and loan cooperative service application, the following conclusions are obtained:

1. Get an androidapplication of savings and loan cooperative service that can run well in accordance with the expectations of user partners.

2. With the existence of an androidapplication of savings and loan cooperative service, it can make it easier to convey information about real-time savings and loan transactions regarding repayment transactions, loan repayment due dates, expansion status.

Suggestions from the author, for future research, it is necessary to develop other functions according to the needs and development and development with other operating systems such as iOS or Windows Phone.

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